

DaimlerChrysler AG

Abstract

A method for heating up the intake air of an internal combustion engine (8) during the preglow phase or start-up phase by means of at least one electrically heatable heating element (12) in the intake line (10) of the internal combustion engine, the heating power being controlled by a control unit (13) of the engine electronics as a function of the operating data of the internal combustion engine, characterized

- in that during the preglow phase (1,2,3), the heating element (12) is initially supplied with full current (1) until the heating element reaches its reference temperature and in that after the reference temperature has been reached and until the start-up phase, a post-heating phase (2,3) begins in which the heating element (12) is kept at a constant temperature by means of a relatively low power,

- and in that during the start-up phase, in a first time period (4a), the heating element (12) is switched off, and in that in a second time period (4b) in which the speed of the internal combustion engine is raised to the starting speed, the heating element (12) is switched on again.